

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.2 Optional Features

Following are descriptions of the various nonchargeable and chargeable optional features that are available in lieu of, or in addition to, the standard features provided with Feature Group C. Nonchargeable optional features are provided as Common Switching, Transport Termination and Local Transport options as set forth in (A) through (C) following. Chargeable optional features are set forth in (D) following.

(A) Common Switching Options

Descriptions of the common switching optional features are set forth in 6.10 following.

- (1) Automatic Number Identification (ANI)
- (2) Signaling Options
  - (a) Delay Dial Start-Pulsing Signaling
  - (b) Immediate Dial Pulse Address Signaling
  - (c) Dial Pulse Address Signaling
- (3) Service Class Routing
- (4) Alternate Traffic Routing
- (5) Trunk Access Limitation
- (6) Band Advance Arrangement Associated with Special Access Service Utilized in the Provision of WATS Service
- (7) End Office End User Line Service Screening for Use with Special Access Service Utilized in the Provision of WATS Service
- (8) Hunt Group Arrangement for Use with Special Access Service Utilized in the Provision of WATS Service

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.7 Description and Provision of Feature Group C (FGC) (Cont'd)

6.7.2 Optional Features

(A) Common Switching Options

- (9) Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS Services
- (10) Nonhunting Number Associated with a Hunt Group Arrangement or Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS Services
- (11) Digital Switched 56 Service

(B) Transport Termination Options

- (1) Operator Trunk – Coin, Non-Coin, or Combined Coin and Non-Coin

The Operator Trunk option is set forth in 6.10.2 (B) following.

(C) Local Transport Options

- (1) Supervisory Signaling

The Supervisory Signaling optional feature, due to its technical nature, is set forth in 15.1.1 following.

- (2) Signaling System 7 (SS7)

The SS7 optional feature allows the customer to send and receive signals for out of band call set up and is available with Feature Group C. This option requires the establishment of a signaling connection between the customer's designated premises/Signaling Point of Interface (SPOI) and a Telephone Company Signaling Transfer Point (STP).

SS7 is provided in both the originating and terminating direction on FGC and each signaling connection is provisioned for two way SS7 signaling information.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.7 Description and Provision of Feature Group C (FGC) (Cont'd)

6.7.2 Optional Features (Cont'd)

(C) Local Transport Options (Cont'd)

(2) Signaling System 7 (SS7) (Cont'd)

The SS7 optional feature is only available where designated in Tariff F.C.C. No. 4 to providers of MTS and WATS for all traffic and to all other customers for originating calls to 800 numbers.

(3) Multifrequency Address Signaling

(4) Calling Party Number (CPN)

(5) Charge Number Parameter (CNP)

(6) 64 Clear Channel Capability

The 64 Clear Channel Capability optional feature, due to its technical nature, is set forth in 15.1.1 following.

(D) Chargeable Optional Features

(1) Interim NXX Translation

The Interim NXX Translation Optional Feature is set forth in 6.10.3(A) following.

(2) The Operator Transfer Service Optional Feature is provided as set forth in 6.10.4 following.

(3) Common Channel Signaling/Signaling System 7 (CCS/SS7)  
Network Connection Service (CCSNC)

The CCSNC Optional Feature is provided as set forth in 6.10.5 following.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.7 Description and Provision of Feature Group C (FGC) (Cont'd)

6.7.3 Design and Traffic Routing

For Feature Group C, the Telephone Company shall design and determine the routing of Switched Access Service. Additionally, for Tandem Switched Transport the Telephone Company will design and determine the routing from the first point of switching to the end office. The Telephone Company shall also decide if capacity is to be provided by originating only, terminating only, or two-way trunk groups. Finally, the Telephone Company will decide whether trunk side access will be provided through the use of two-wire or four-wire trunk terminating equipment.

Selection of facilities and equipment and traffic routing of the service are based on standard engineering methods, available facilities and equipment, and actual traffic patterns.

## ACCESS SERVICE

### 6. Switched Access Service (Cont'd)

#### 6.7 Description and Provision of Feature Group C (FGC) (Cont'd)

##### 6.7.4 Measuring Access Minutes

Customer traffic to end offices will be measured (i.e., recorded) by the Telephone Company at the end office switches. Originating and terminating calls will be measured or imputed by the Telephone Company to determine the basis for computing chargeable access minutes. In the event the customer message detail is not available because the Telephone Company lost or damaged tapes or incurred recording system outages, the Telephone Company will estimate the volume of lost customer access minutes of use based on previously known values.

For terminating calls over FGC when measurement capability exists, the measured minutes are the chargeable access minutes. For originating calls over FGC, chargeable originating access minutes are derived from recorded minutes in the following manner:

- Step 1: Obtain recorded originating minutes and messages, sourcing from the appropriate recording data.
- Step 2: Obtain the total attempts by dividing the originating measured messages by the completion ratio. Completion ratios (CR) are obtained separately for the major call categories such as DDD, operator, 800 series, 900, directory assistance and international from a sample study which analyzes the ultimate completion status of the total attempts which receive acknowledgment from the customer. That is, Measured Messages divided by Completion Ratio equals Total Attempts.

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.4 Measuring Access Minutes (Cont'd)

Step 3: Obtain the total non-conversation time additive (NCTA) by multiplying the total attempts (obtained in Step 2) by the NCTA per attempt ratio. The NCTA per attempt is obtained from the sample study identified in Step 2 by measuring the non-conversation time associated with both completed and incompletd attempts. The total NCTA is the time on a completed attempt from customer acknowledgment of receipt of call to called party answer (set up and ringing) plus the time on an incompletd attempt from customer acknowledgment of call until the access tandem or end office receives a disconnect signal (ring - no answer busy or network blockage). That is, Total Attempts times Non-Conversation Time per Attempt Ratio equals Total NCTA.

Step 4: Obtain total chargeable originating access minutes by adding the total NCTA (obtained in Step 3) to the recorded originating measured minutes (obtained in Step 1). That is, Measured Minutes plus NCTA equals Chargeable Originating Access Minutes.

Following is an example which illustrates how the chargeable originating access minutes are derived from the measured originating minutes using this formula.

Where: Measured Minutes (M. Min.) = 7,000  
Measured Messages (M. Mes.) = 1,000  
Completion Ratio (CR) = .75  
NCTA per Attempt = .4

$$(1) \quad \text{Total Attempts} = \frac{1,000 \text{ (M. Mes.)}}{.75 \text{ (CR)}} = 1,333.3$$

$$(2) \quad \text{Total NCTA} = .4 \text{ (NCTA per Attempt)} \times 1,333.33 = 533.33$$

$$(3) \quad \text{Total Chargeable Originating Access Minutes} = 7,000 \text{ (M. Min.)} + 533.33 \text{ (NCTA)} = 7,533.33$$

## ACCESS SERVICE

### 6. Switched Access Service (Cont'd)

#### 6.7 Description and Provision of Feature Group C (FGC) (Cont'd)

##### 6.7.4 Measuring Access Minutes (Cont'd)

FGC access minutes or fractions thereof, the exact value of the fraction being a function of the switch technology where the measurement is made, are accumulated over the billing period for each end office, and are then rounded up to the nearest access minute for each end office.

##### Originating Usage

For originating calls over FGC provided with Multifrequency Signaling, usage measurement begins when the originating FGC first point of switching receives answer supervision from the customer's point of termination, indicating the called party has answered.

For originating calls over FGC provided with Signaling System 7 (SS7) Signaling when the FGC end office is not routed through an access tandem for connection to the customer, usage measurement begins when the SS7 Initial Address Message is sent from the Service Switching point (SSP) to the Signal Transfer point (STP).

For originating calls over FGC provided with Signaling System 7 (SS7) Signaling when the FGC end office is routed through a tandem for connection to the customer, usage measurement begins when the FGC end office receives the SS7 Exit Message from the tandem.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.7 Description and Provision of Feature Group C (FGC) (Cont'd)

6.7.4 Measuring Access Minutes (Cont'd)

Originating Usage (Cont'd)

The measurement of originating call usage over FGC provided with Multifrequency Signaling ends when the originating FGC first point of switching receives disconnect supervision from either the originating end user's end office, indicating the originating end user has disconnected, or the customer's point of termination, whichever is recognized first by the first point of switching.

The measurement of originating call usage over FGC provided with SS7 Signaling ends when the originating FGC end office receives an SS7 Release Message indicating either the originating or terminating end user has disconnected.

Terminating Usage

For terminating calls over FGC the chargeable access minutes are either measured or derived. For terminating calls over FGC where measurement capability does not exist, terminating FGC usage is derived from originating usage, excluding usage from calls to closed end services or Directory Assistance Services.

For terminating calls over FGC provided with Multifrequency Signaling, where measurement capability exists, the measurement of chargeable access minutes begins when the terminating FGC first point of switching receives answer supervision from the terminating end user's end office, indicating the terminating end user has answered. This measurement ends when the terminating FGC first point of switching receives an on-hook supervisory signal from the terminating end user's end office, indicating the terminating end user has disconnected, or the customer's point of termination, whichever is recognized first by the first point of switching.

For terminating calls over FGC with SS7 signaling, usage measurement begins when the terminating recording switch receives answer supervision from the terminating end user. The Telephone Company switch receives answer supervision and sends the indication to the customer in the form of an answer message. The measurement of terminating FGC call usage ends when the entry switch receives or sends a Release Message, whichever occurs first.



ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.7 Description and Provision of Feature Group C (FGC) (Cont'd)

6.7.5 Design Blocking Probability

The Telephone Company will design the facilities used in the provision of Switched Access Service FGC to meet the blocking probability criteria as set forth in (A) and (B) following.

- (A) For Feature Group C, the design blocking objective will be no greater than one percent (.01) between the point of terminating at the customer's designated premises and the first point of switching when traffic is directly routed without an alternate route. Standard traffic engineering methods will be used by the Telephone Company to determine the number of transmission paths required to achieve this level of blocking.
- (B) The Telephone Company will perform routine measurement functions to assure that an adequate number of transmission paths are in service. The Telephone Company will recommend that additional capacity (i.e., busy hour minutes of capacity) be ordered by the customer when additional paths are required to reduce the measured blocking to the designed blocking level. For the capacity ordered, the design blocking objective is assumed to have been met if the routing measurements show that the measured blocking does not exceed the threshold listed in the follow in tables.

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.5 Design Blocking Probability (Cont'd)

## (B) (Cont'd)

- (1) For transmission paths carrying only first routed traffic direct between an end office and customer's designated premises without an alternate route, and for paths carrying only overflow traffic, the measured blocking thresholds are as follows:

Number of Transmission Paths Per Trunk Group	Measured Blocking Thresholds in the Time Consistent Busy Hour for the Number of Measurements Taken Between 8:00 a.m. and 11:00 p.m.			
	Per Trunk Group			
	15-20 Measurements	11-14 Measurements	7-10 Measurements	3-6 Measurements
2	7%	8%	9%	14%
3	5%	6%	7%	9%
4	5%	6%	7%	8%
5-6	4%	5%	6%	7%
7 or more	3%	3.5%	4%	6%

- (2) For transmission paths carrying first routed traffic between an end office and customer's premises via an access tandem, the measured blocking thresholds are as follows:

Number of Transmission Paths Per Trunk Group	Measured Blocking Thresholds in the Time Consistent Busy Hour for the Number of Measurements Taken Between 8:00 a.m. and 11:00 p.m.			
	Per Trunk Group			
	15-20 Measurements	11-14 Measurements	7-10 Measurements	3-6 Measurements
2	4.5%	5.5%	6.0%	9.5%
3	3.5%	4.0%	4.5%	6.0%
4	3.5%	4.0%	4.5%	5.5%
5-6	2.5%	3.5%	4.0%	4.5%
7 or more	2.0%	2.5%	3.0%	4.0%

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.7 Description and Provision of Feature Group C (FGC) (Cont'd)

6.7.6 Testing Capabilities

FGC is provided, in the terminating direction where equipment is available, with seven digit access to balance (100 type) test line, milliwatt (102 type) test line, nonsynchronous or synchronous test line, automatic transmission measuring (105 type) test line, data transmission (107 type) test line, loop around test line, short circuit test line and open circuit test line. In addition to the tests described in 6.2.4 preceding which are included with the installation of service (Acceptance Testing) and as ongoing routine testing, Additional Cooperative Acceptance Testing, Additional Automatic Testing and Additional Manual Testing are available as set forth in 13.3.1 following.

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD)6.8.1 Description

- (A) FGD Access, which is available to all customers, provides trunk side access to Telephone Company end office switches. Special Access Services utilized for connection with FGD at Telephone Company designated WATS Serving offices as set forth in Section 7 following may be ordered separately by a customer other than the customer which orders the FGD Switched Access Service for the provision of WATS or WATS-type services. Special Access Services are ordered as set forth in 5.2 preceding.
- (B) FGD is provided at Telephone Company designated end office switches whether routed directly or via Telephone Company designated electronic access tandem switches. The Telephone Company will designate the first point(s) of switching for FGD services where the Telephone Company elects to provide equal access through a centralized equal access arrangement. Those Telephone Company offices providing equal access through centralized arrangements are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.
- (C) FGD is provided as trunk side switching through the use of end office or access tandem switch trunk equipment. The switch trunk equipment is provided with wink start start-pulsing signals and answer and disconnect supervisory signaling.
- (D) FGD switching is provided with Multifrequency Address Signaling or out of band SS7 Signaling. With Multifrequency Address Signaling and SS7 Signaling, up to 12 digits of the called party number dialed by the customer's end user using dual tone multifrequency or dial pulse address signals will be provided by Telephone Company equipment to the customer's premises where the Switched Access Service terminates. Such address signals will be subject to the ordinary transmission capabilities of the Local Transport provided.

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.1 Description (Cont'd)

- (E) FGD switching, when used in the terminating direction, may be used to access valid NXXs in the MSA, time or weather announcement services of the Telephone Company, community information services of an information service provider, and other customers' services (by dialing the appropriate codes) when such services can be reached using valid NXX codes. When directly routed to an end office, only those valid NXX codes served by that office may be accessed. When routed through an access tandem, only those valid NXX codes served by end offices subtending the access tandem may be accessed. The customer will also be billed additional non-access charges for calls to certain community information services, for which rates are applicable under Telephone Company exchange service tariffs, e.g., 976 (DIAL-IT) Network Service. Additionally, non-access charges will also be billed for calls from a FGD trunk to another customer's service in accordance with that customer's applicable service rates when the Telephone Company performs the billing function for that customer. Calls in the terminating direction will not be completed to 950-XXXX access codes, local operator assistance (0- and 0+), Directory Assistance (411 and 555-1212), service codes 611 and 911 and 101XXXX access codes. Calls will be completed to Directory Assistance (NPA-555-1212 or 555-1212) when FGD switching is combined with Directory Assistance switching. The combination of FGD Switched Access Service with DA Service is provided as set forth in Section 9. following. FGD may not be switched, in the terminating direction, to Switched Access Service Feature Groups B, C, or D.

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.1 Description (Cont'd)

- (F) The Telephone Company will establish a trunk group or groups for the customer at end office switches or access tandem switches where FGD switching is provided. When required by technical limitations, a separate trunk group will be established for each type of FGD switching arrangement provided. Different types of FGD or other switching arrangements may be combined in a single trunk group at the option of the Telephone Company.
- (G) The access code for FGD switching is a uniform access code of the form 101XXXX. A uniform access code(s) will be the assigned number of all FGD access provided to the customer by the Telephone Company. No access code is required for calls to a customer over FGD Switched Access Service if the end user's telephone exchange service is arranged for presubscription to that customer, as set forth in 13.4 following.

Where no access code is required, the number dialed by the customer's end user shall be a seven or ten digit number for calls in the North American Numbering Plan (NANP). For international calls outside the NANP, a seven to twelve digit number may be dialed. The form of the numbers dialed by the customer's end user is NXX-XXXX, 0 or 1 + NXX-XXXX, NPA + NXX-XXXX, 0 or 1 + NPA + NXX-XXXX, and, when the end office is equipped for International Direct Distance Dialing (IDDD), 01 + CC + NN or 011 + CC + NN.

When the 101XXXX access code is used, FGD switching also provides for dialing the digit 0 for access to the customer's operator, 911 for access to the Telephone Company's emergency reporting service, or the end-of-dialing digit (#) for cut-through access to the customer designated premises.

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.1 Description (Cont'd)

- (H) FGD switching will be arranged to accept calls from telephone exchange service locations without the need for dialing the 101XXXX uniform access code. Each telephone exchange service line may be marked with a code to identify which 101XXXX code its calls will be directed to for interMSA service.
- (I) Unless prohibited by technical limitations, the customer's Interim NXX Translation and/or 800 Data Base traffic may, at the option of the customer, be combined in the same trunk group arrangement with the customer's non-Interim NXX Translation and/or 800 Data Base traffic. When required by technical limitations, or at the request of the customer, a separate trunk group will be established for Interim NXX Translation and/or 800 Data Base traffic.
- (J) When a customer has had FGB access in an end office and subsequently replaces the FGB access with FGD access, at the mutual agreement of the customer and the Telephone Company, the Telephone Company will direct calls dialed by the customer's end users using the customer's previous FGB access code to the customer's FGD access service. The customer must be prepared to handle normally dialed FGD calls, as well as calls dialed with the FGB access code which requires the customer to receive additional address signaling from the end user. Such calls will be rated as FGD. The Telephone Company may, with 90 days' written notice to the customer, discontinue this arrangement.
- (K) For FGD switched access service to a Wireless Switching Center (WSC) directly interconnected to a Telephone Company access tandem office, the customer will be billed only the Local Transport premium rate element for the FGD usage. The mileage used to determine the monthly rate for the local transport rate element is as set forth in 6.4.6(G) preceding.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.8 Description and Provision of Feature Group D (FGD) (Cont'd)

6.8.1 Description (Cont'd)

- (L) Operator Transfer Service (forwarding of 0- calls) may be provided with FGD Switched Access Service at Telephone Company designated Operator Services locations.

The Telephone Company will provide Operator Transfer Service for calls originating from telephone numbers associated with exchange service lines in end offices subtending the Operator Services location. Operator Transfer Service is provided as set forth in 6.10.4 following.



## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.2 Optional Features

Following are the various nonchargeable and chargeable optional features that are available in lieu of, or in addition to, the standard features provided with Feature Group D. Nonchargeable optional features are provided as Common Switching, Transport Termination and Local Transport options as set forth in (A) through (C) following. Chargeable optional features are set forth in (D) following.

(A) Common Switching Options

Descriptions of the common switching optional features are set forth in 6.10 following.

- (1) Automatic Number Identification (ANI)
- (2) Service Class Routing
- (3) Alternate Traffic Routing
- (4) Trunk Access Limitation
- (5) Call Gapping Arrangement
- (6) International Carrier Option
- (7) Band Advance Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Service
- (8) End Office End User Line Service Screening for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Service
- (9) Hunt Group Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Service

## ACCESS SERVICE

### 6. Switched Access Service (Cont'd)

#### 6.8 Description and Provision of Feature Group D (FGD) (Cont'd)

##### 6.8.2 Optional Features (Cont'd)

##### (A) Common Switching Options (Cont'd)

- (10) Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- (11) Nonhunting Number Associated with a Hunt Group Arrangement or Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- (12) Digital Switched 56 Service

##### (B) Transport Termination Options

##### (1) Operator Trunk - Full Feature

The Operator Trunk optional feature is set forth in 6.10.2(C) following.

##### (C) Local Transport Options

##### (1) Supervisory Signaling

The Supervisory Signaling optional feature, due to its technical nature, is set forth in 15.1.1 following.

##### (2) Signaling System 7 (SS7)

The SS7 optional feature allows the customer to send and receive signals for out of band call set up and is available with Feature Group D. This option requires the establishment of a signaling connection between the customer's designated premises/Signaling Point of Interface (SPOI) and a Telephone Company's Signaling Transfer Point (STP).

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.2 Optional Features (Cont'd)(C) Local Transport Options (Cont'd)(2) Signaling System 7 (SS7) (Cont'd)

SS7 is provided in both the originating and terminating direction on FGD and each signaling connection is provisioned for Two way SS7 signaling information.

(3) Multifrequency Address Signaling(4) Calling Party Number (CPN) Parameter(5) Charge Number Parameter (CNP)(6) Carrier Selection Parameter (CSP)(7) 64 Clear Channel Capability

The 64 Clear Channel capability optional feature, due to its technical nature, is set forth in 15.1.1 following.

(D) Chargeable Optional Features(1) Interim NXX Translation

The Interim NXX Translation Optional Feature is set forth in 6.10.3(A) following.

## (2) The Operator Transfer Service Optional Feature is provided as set forth in 6.10.3(B) following.

(3) Common Channel Signaling/Signaling System 7 (CCS/SS7)  
Network Connection Service (CCSNC)

The CCSNC Optional Feature is provided as set forth in 6.10.5 following.

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.3 Design and Traffic Routing

For Feature Group D, the Telephone Company shall design and determine the routing of Tandem Switched Transport service, including the selection of the first point of switching and the selection of facilities from the interface to any switching point and to the end offices where busy hour minutes of capacity are ordered. The Telephone Company shall also decide if capacity is to be provided by originating only, terminating only, or two-way trunk groups. Finally, the Telephone Company will decide whether trunk side access will be provided through the use of two-wire or four-wire trunk terminating equipment.

For Feature Group D Direct Trunked Transport service, the Telephone Company will determine the routing of Switched Access Service from the point of interface to the first point of switching or, if the customer specifies one or more hub locations for multiplexing, from the point of interface to the hub location, from one hub location to another hub location, and/or from a hub location to the first point switching.

Selection of facilities and equipment and traffic routing of the service is based on standard engineering methods, available facilities and equipment, and actual traffic patterns. The Telephone Company will designate the first point(s) of switching and routing to be used where equal access is provided through a centralized equal access arrangement. Those Telephone Company offices providing equal access through centralized arrangements are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

6.8.4 Measuring Access Minutes

Customer traffic to end offices will be recorded at end office switches or access tandem switches. Originating and terminating calls will be measured or derived to determine the basis for computing chargeable access minutes. In the event the customer message detail is not available because the Telephone Company lost or damaged tapes or incurred recording system outages, the Telephone Company will estimate the volume of lost customer access minutes of use based on previously known values.

## ACCESS SERVICE

### 6. Switched Access Service (Cont'd)

#### 6.8 Description and Provision of Feature Group D (FGD) (Cont'd)

##### 6.8.4 Measuring Access Minutes (Cont'd)

FGD access minutes or fractions thereof, the exact value of the fraction being a function of the switch technology where the measurement is made, are accumulated over the billing period for each end office, and are then rounded up to the nearest access minute for each end office.

##### Originating Usage

For originating calls over FGD the measured minutes are the chargeable access minutes.

For originating calls over FGD, provided with Multi-Frequency Signaling, usage measurement begins when the originating FGD first point of switching receives the first wink supervisory signal forwarded from the customer's point of termination.

For originating calls over FGD provided with Signaling System 7 (SS7) Signaling when the FGD end office is not routed through an access tandem for connection to the customer, usage measurement begins when the SS7 Initial Address Message is sent from the Service Switching Point (SSP) to the Signal Transfer Point (STP).

For originating calls over FGD provided with Signaling System 7 (SS7) Signaling when the FGD end office is routed through a tandem for connection to the customer, usage measurement begins when the FGD end office is routed through a tandem for connection to the customer, usage measurement begins when the FGD end office receives the SS7 Exit message from the tandem.

The measurement of originating call usage over FGD provided with Multi-Frequency Signaling ends when the originating FGD first point of switching receives disconnect supervision from either the originating end user's end office, indicating the originating end user has disconnected, or the customer's point of termination, whichever is recognized first by the first point of switching.

The measurement of originating call usage over FGD provided with SS7 Signaling ends when the originating FGD end office receives an SS7 Release Message indicating either the originating or terminating end user has disconnected.

## ACCESS SERVICE

### 6. Switched Access Service (Cont'd)

#### 6.8 Description and Provision of Feature Group D (FGD) (Cont'd)

##### 6.8.4 Measuring Access Minutes (Cont'd)

###### Terminating Usage

For terminating calls over FGD the chargeable access minutes are either measured or derived.

For terminating calls over FGD provided with Multi-frequency Signaling, where measurement capability exists, the measurement of chargeable access minutes begins when the terminating FGD first point of switching receives answer supervision from the terminating end user's end office, indicating the terminating end user has answered. This measurement ends when the terminating FGD first point of switching receives disconnect supervision from either the terminating end user's end office, indicating the terminating end user has disconnected, or the customer's point of termination, whichever is recognized first by the first point of switching.

For terminating calls over FGD, where measurement capability does not exist, terminating FGD usage is derived from originating usage, excluding usage from calls to closed end services or Directory Assistance Services.

For terminating calls over FGD, where measurement capability does not exist, terminating FGD usage is derived from originating usage, excluding usage from calls to closed end services or Directory Assistance Services.

For terminating calls over FGD with SS7 signaling, usage measurement begins when the terminating recording switch receives answer supervision from the terminating end user. The Telephone Company switch receives answer supervision and send the indication to the customer in the form of an answer message. The measurement of terminating FGD call usage ends when the entry switch receives or sends a release message, whichever occurs first.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.8 Description and Provision of Feature Group D (FGD) (Cont'd)

6.8.5 Design Blocking Probability

The Telephone Company will design the facilities used in the provision of Switched Access Service FGD to meet the blocking probability criteria as set forth in (A) and (B) following.

- (A) For Feature Group D, the design blocking objective will be no greater than one percent (.01) between the point of termination at the customer's designated premises and the end office switch, whether the traffic is directly routed without an alternate route or routed via an access tandem. Standard traffic engineering methods as set forth in reference document Telecommunications Transmission Engineering - Volume 3 - Networks and Services (Chapters 6-7) will be used by the Telephone Company to determine the number of transmission paths required to achieve this level of blocking.
- (B) The Telephone Company will perform routine measurement functions to assure that an adequate number of transmission paths are in service. The Telephone Company will recommend that additional capacity (i.e., busy hour minutes of capacity or trunks) be ordered by the customer when additional paths are required to reduce the measured blocking to the designed blocking level. For the capacity ordered, the design blocking objective is assumed to have been met if the routine measurements show that the measured blocking does not exceed the threshold listed in the following tables.

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.5 Design Blocking Probability (Cont'd)

(B) (Cont'd)

- (1) For transmission paths carrying only first routed traffic direct between an end office and customer's designated premises without an alternate route, and for paths carrying only overflow traffic, the measured blocking thresholds are as follows:

Number of Transmission Paths Per Trunk Group	Measured Blocking Thresholds in the Time Consistent Busy Hour for the Number of Measurements Taken Between 8:00 a.m. and 11:00 p.m. Per Trunk Group			
	15-20	11-14	7-10	3-6
	Measurements	Measurements	Measurements	Measurements
2	7%	8%	9%	14%
3	5%	6%	7%	9%
4	5%	6%	7%	8%
5-6	4%	5%	6%	7%
7 or more	3%	3.5%	4%	6%

- (2) For transmission paths carrying first routed traffic between an end office and customer's premises via an access tandem, the measured blocking thresholds are as follows:

Number of Transmission Paths Per Trunk Group	Measured Blocking Thresholds in the Time Consistent Busy Hour for the Number of Measurements Taken Between 8:00 a.m. and 11:00 p.m. Per Trunk Group			
	15-20	11-14	7-10	3-6
	Measurements	Measurements	Measurements	Measurements
2	4.5%	5.5%	6.0%	9.5%
3	3.5%	4.0%	4.5%	6.0%
4	3.5%	4.0%	4.5%	5.5%
5-6	2.5%	3.5%	4.0%	4.5%
7 or more	2.0%	2.5%	3.0%	4.0%



## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.6 Network Blocking Charge

The customer will be notified by the Telephone Company to increase its capacity (busy hour minutes of capacity or quantities of trunks) when excessive trunk group blocking occurs on groups carrying Feature Group D traffic and the measured access minutes for that hour exceed the capacity purchased. Excessive trunk group blocking occurs when the blocking thresholds stated below are exceeded. They are predicated on time consistent, hourly measurements over a 30 day period excluding Saturdays, Sundays and national holidays. If the order for additional capacity has not been received by the Telephone Company within 15 days of the notification, the Telephone Company will bill the customer, at the rate set forth in 17.1.2 following, for each overflow in excess of the blocking threshold when (1) the average "30 day period" overflow exceeds the threshold level for any particular hour and (2) the "30 day period" measured average originating or two-way usage for the same clock hour exceeds the capacity purchased.

Blocking Thresholds

<u>Trunks in Service</u>	<u>1%</u>	<u>1/2%</u>
1-2	7.0%	4.5%
3-4	5.0%	3.5%
5-6	4.0%	2.5%
7 or greater	3.0%	2.0%

The 1% blocking threshold is for transmission paths carrying traffic direct (without an alternate route) between an end office and a customer's premises. The 1/2% blocking threshold is for transmission paths carrying first routed traffic between an end office and a customer's premises via an access tandem.

## ACCESS SERVICE

### 6. Switched Access Service (Cont'd)

#### 6.8 Description and Provision of Feature Group D (FGD) (Cont'd)

##### 6.8.7 Testing Capabilities

FGD is provided, in the terminating direction where equipment is available, with seven digit access to balance (100 type) test line, milliwatt (102 type) test line, nonsynchronous or synchronous test line, automatic transmission measuring (105 type) test line, data transmission (107 type) test line, loop around test line, short circuit test line and open circuit test line. In addition to the tests described in 6.2.4 preceding, which are included with the installation of service (Acceptance Testing) and as ongoing routine testing, Additional Cooperative Acceptance Testing, Additional Automatic Testing and Additional Manual Testing, are available as set forth in 13.3.1 following.

When SS7 Signaling is ordered, network compatibility and other testing will be performed cooperatively by the Telephone Company and the customer as specified in Technical References TR-TSV-000905.

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.9 Interim Access6.9.1 Reserved For Future Use6.9.2 Abbreviated Dialing Arrangement (ADA)

FGB Switched Access Service with an ADA (FGB ADA) is available to all customers, other than providers of MTS/WATS, for Telephone Company designated non equal access end offices. FGB ADA enables end users to utilize a one or two digit access code to access customers who have ordered this service. When FGD becomes available in an end office, FGB ADA will no longer be provided at that end office.

(A) FGB ADA Exceptions

FGB ADA is available to all customers other than providers of MTS/WATS and is provisioned like FGB Switched Access Service as set forth in 6.6.1 preceding with the following exceptions:

- (1) FGB ADA is available as originating only service, or as both originating and terminating service (2-way). FGB ADA is not available as terminating only service.
- (2) FGB ADA is only provided by direct routing to an end office switch.
- (3) The forms of the access code for originating FGB ADA switching are N or NX.\* Assignment of FGB ADA access codes will be on a first-come, first-served basis and is subject to the availability of access code numbers.
- (4) Calls in the terminating direction will not be completed to FGB with an ADA access code (N and NX).

\* The abbreviations N and NX when used in the context of FGB ADA, denotes the following:  
N signifies a number between 2 and 9, and X signifies a number between 0 and 9.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features

Following are descriptions of the various optional features that are available in lieu of, or in addition to, the standard features provided with Feature Groups. They are provided as Common Switching, Transport Termination, Interim NXX Translation options, or Operator Transfer Service option. Local Transport options associated with Common Channel Signaling Network Connection Service (CCSNC) are described in 6.10.1 following. All other Local Transport options, due to their technical nature, are described in 15.1.1 following.

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features

The following table shows the Feature Groups with which the optional features are available.

<u>Option</u>	<u>Available Feature Groups</u>			
	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
A) Call Denial on Line or Hunt Group	X			
B) Service Code Denial on Line or Hunt Group	X			
C) Hunt Group Arrangement	X			
D) Uniform Call Distribution Arrangement	X			
E) Nonhunting Number for Use with Hunt Group or Uniform Call Distribution Arrangement	X			
F) Automatic Number Identification (ANI)		X	X	X
G) Up to 7 Digit Outpulsing of Access Digits to Customer		X		
H) Delay Dial Start-Pulsing Signaling			X	
I) Immediate Dial Pulse Address Signaling			X	
J) Dial Pulse Address Signaling			X	
K) Service Class Routing			X	X
L) Alternate Traffic Routing		X	X	X

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

<u>Option</u>		<u>Available Feature Groups</u>			
		<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
M)	Trunk Access limitation			X	X
N)	Call Gapping Arrangement				X
O)	International Carrier Option				X
P)	Band Advance Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services	X	X	X	X
Q)	End Office End User Line Service Screening for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services			X	X
R)	Hunt Group Arrangement for Use with Special Access Service utilized in the Provision of WATS or WATS-Type Services	X	X	X	X
S)	Uniform Call Distribution Arrangement for Use with Access Service Utilized in the Provision of WATS or WATS-Type Services	X	X	X	X
T)	Nonhunting Number Associated with Hunt Group Arrangement or Uniform Call Distribution Arrangement for use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services	X	X	X	X
U)	Digital Switched 56 Service			X	X
V)	Multifrequency Address Signaling			X	X
W)	Signaling System 7(SS7) Signaling			X	X
X)	Calling Party Number (CPN)			X	X
Y)	Carrier Selection Parameter (CSP)				X
Z)	Charge Number Parameter (CNP)			X	X
AA)	Flexible Automatic Number Identification (Flex ANI)				X

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(A) Call Denial on Line or Hunt Group

This option allows for the screening of terminating Feature Group A calls. There are two screening arrangements available with this option as follows: 1) limiting terminating calls for completion to only 411 or 555-1212 whichever is available, 611, 911, 800 series and a Telephone Company specified set of NXXs within the Telephone Company local exchange calling area of the dial tone office in which the arrangement is provided or, 2) limiting terminating calls to completion to only the NXXs associated with all end offices in the MSA, i.e., the call cannot be further switched or routed out of the MSA nor will calls be completed to 411 or 555-1212 whichever is available, 611, 911, or 800 series. All other calls are routed to a reorder tone or recorded announcement. Arrangement 1 is provided in all Telephone Company electronic end offices and, where available, in electromechanical end offices. Arrangement 2 is provided where available. This feature is available with Feature Group A.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

(F) Automatic Number Identification (ANI) (Cont'd)

- (3) The ten digit ANI telephone number is only available with Feature Group D. The ten digit ANI telephone number consists of the Number Plan Area (NPA) plus the seven digit ANI telephone number. The ten digit ANI telephone number will be transmitted on all calls except those identified as multiparty line or ANI failure, in which case only the NPA will be transmitted (in addition to the information digit described below). Ten digit ANI is provided with Multifrequency Address Signaling or SS7 Signaling.
- (4) With Feature Group C, at the option of the customer, ANI may be ordered from end offices where Telephone Company recording for end user billing is not provided. Additionally, ANI is provided from end offices where message detail recording is not required by the Telephone Company, as with 800 series service. ANI is not provided from end offices where the Telephone Company forwards ANI to its recording equipment.



## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(F) Automatic Number Identification (ANI) (Cont'd)

- (3) The ten digit ANI telephone number is only available with Feature Group D. The ten digit ANI telephone number consists of the Number Plan Area (NPA) plus the seven digit ANI telephone number. The ten digit ANI telephone number will be transmitted on all calls except those identified as multiparty line or ANI failure, in which case only the NPA will be transmitted (in addition to the information digit described below). Ten digit ANI is provided with Multifrequency Address Signaling or SS7 Signaling.
- (4) With Feature Group C, at the option of the customer, ANI may be ordered from end offices where Telephone Company recording for end user billing is not provided. Additionally, ANI is provided from end offices where message detail recording is not required by the Telephone Company, as with 800 service. ANI is not provided from end offices where the Telephone Company forwards ANI to its recording equipment.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

(F) Automatic Number Identification (ANI) (Cont'd)

- (5) Where complete ANI detail cannot be provided, e.g., on calls from 4 and 8 party services, information digits will be provided to the customer.

The information digits identify:

- (a) telephone number is the station billing number - no special treatment required,
- (b) multiparty line - telephone number is a 4- or 8- party line and cannot be identified - number must be obtained via an operator or in some other manner,
- (c) ANI failure has occurred in the end office switch which prevents identification of calling telephone number - must be obtained by operator or in some other manner,
- (d) hotel/motel originated call which requires room number identification,
- (e) coinless station, hospital, inmate, etc. call which requires special screening or handling by the customer, and
- (f) call is an Automatic Identified Outward Dialed (AIOD) call from customer premises equipment. The AIOD ANI telephone number is the listed telephone number of the customer and is not the telephone number of the calling party.

These ANI information digits are generally available with Feature Groups B, C, and D.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

(F) Automatic Number Identification (ANI) (Cont'd)

- (6) Additional ANI information digits are available with Feature Group D also. They include:
- (a) InterMSA restricted - telephone number is identified line
  - (b) InterMSA restricted - hotel/motel line
  - (c) InterMSA restricted - coinless, hospital, inmate, etc., line

These information digits will be transmitted as agreed to by the customer and the Telephone Company.

Flexible Automatic Number Identification (Flex ANI) is an enhancement to ANI and is offered as a Common Switching Nonchargeable Optional Feature of Feature Group D as described in 6.10.1(AA) following.

(7) Restrictions on Use and Sale of ANI

- (a) Intrastate access customers of this tariff may use ANI in the following manner:
- (i) For billing and collection information, for routing, screening, and completing the originating subscriber's call or transaction, or for services directly related to the originating telephone subscriber's call or transaction.

The customer may use ANI to offer a product or service that is directly related to the products or services previously acquired from the customer by the originating subscriber.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

(F) Automatic Number Identification (ANI) (Cont'd)

(7) Restrictions on Use and Sale of ANI (Cont'd)

(b) Intrastate access customers of this tariff may not use ANI in the following manner:

- (i) Reusing or selling the telephone number or billing information without first notifying the originating telephone subscriber and obtaining the affirmative consent of such subscriber for reuse or sale.
- (ii) Disclosing (except as permitted in (a), preceding), any information derived from the ANI for any purpose other than 1) performing the services or transactions that are the subject of the originating subscriber's call, 2) ensuring network performance security and the effectiveness of call delivery, 3) compiling, using, and disclosing aggregate information, and 4) complying with applicable law or legal process.

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(G) Up to 7 Digit Outpulsing of Access Digits to Customer

This option provides for the end office capability of providing up to 7 digits of the uniform access code (950-XXXX) to the customer designated premises. The customer can request that only some of the digits in the access code be forwarded. The access code digits would be provided to the customer designated premises using multifrequency signaling, and transmission of the digits would precede the forwarding of ANI if that feature were provided. This feature is available with Feature Group B.

(H) Delay Dial Start-Pulsing Signaling

Where available, this option provides a method of indicating to the near end trunk circuit readiness to accept address signaling information by the far end trunk circuit. Delay dial is often referred to as an off-hook, on-hook signaling sequence. The delay dial signal is the off-hook interval and the start-pulsing signal is the on-hook interval. With integrity check, the calling office will not outpulse until a delay dial (off-hook) signal followed by a start-pulsing (on-hook) signal has been identified at the calling office. This option is available with Feature Group C.

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(I) Immediate Dial Pulse Address Signaling

Where available, this option provides for the forwarding of dial pulses from the Telephone Company end office to the customer without the need of a start-pulsing signal from the customer. It is available with Feature Group C.

(J) Dial Pulse Address Signaling

Where available, this trunk side option provides for the transmission of number information, e.g., called number, between the end office switching system and the customer designated premises (in either direction) by means of direct current pulses. It is available with Feature Group C.

(K) Service Class Routing

This option provides the capability of directing originating traffic from an end office to a trunk group to a customer designated premises, based on the line class of service (e.g., coin, multiparty or hotel/motel), service prefix indicator (e.g., 0-, 0+, 01+ or 011+) or Service Access Code (e.g., 900). It is provided in suitable equipped end office or access tandem switches. It is available with Feature Groups C and D.

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(L) Alternate Traffic Routing

When the customer orders both Direct Trunked Transport and Tandem Switched Transport at the same end office, this option provides the capability of directing originating traffic from an end office (or appropriately equipped access tandem) to a trunk group (the "high usage" group) to a customer designated premises until that group is fully loaded, and then delivering additional originating traffic (the "overflowing" traffic) from the same end office or access tandem to a different trunk group (the "final" group) to a second customer designated premises. The customer shall specify the last trunk CCS desired for the high usage group. It is provided in suitably equipped end office or access tandem switches. It is available with Feature Groups B, C and D.

(M) Trunk Access Limitation

This option provides for the routing of originating 900 service calls to a specified number of transmission paths in a trunk group, in order to limit group, in order to limit (choke) the completion of such traffic to the customer. Calls to the designated service which could not be completed over the subset of transmission paths in the trunk group, i.e., the choked calls, would be routed to reorder tone. It is provided in all Telephone Company electronic end offices and where available in electromechanical end offices. It is available with Feature Groups C and D.

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(N) Call Gapping Arrangement

This option, provided in suitably equipped end office switches, provides for the routing of originating calls to 900 service to be switched in the end office to all transmission paths in a trunk group at a prescribed rate of flow, e.g., one call every five seconds, in order to limit (choke) the completion of such traffic to the customer. Calls to the designated service which are denied access by this feature, i.e., the choked calls, would be routed to a no-circuit announcement. It is provided in selected Feature Group D equipped end offices and is available only with Feature Group D.

(O) International Carrier Option

This option allows for Feature Group D end offices or access tandem switches equipped for International Direct Distance Dialing to be arranged to forward the international calls of one or more international carriers to the customer (i.e., the Telephone Company is able to route originating international calls to a customer other than the one designated by the end user either through presubscription or 101XXXX dialing). This arrangement requires provision of written verification to the Telephone Company that the customer is authorized to forward such calls. The written verification must be in the form of a letter of agency authorizing the customer to order the option on behalf of the international carrier. This option is only provided at Telephone Company end offices or access tandems equipped for International Direct Distance Dialing and is available only with Feature Group D.



## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(P) Band Advance Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services

This option, which is provided in association with two or more Special Access Service groups, provides for the automatic overflow of terminating calls to a second Special Access Service group, when the first group has exceeded its call capacity. This option is available with Feature Groups A, B, C and D.

(Q) End Office End User Line Service Screening for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services

This option provides the ability to verify that an end user has dialed a called party address (by screening the called NPA and/or NXX on the basis of geographical bands selected by the Telephone Company) which is in accordance with that end user's service agreement with the customer, e.g., WATS. This option is provided in all Telephone Company electronic end offices and, where available, in electromechanical end offices which are designated as WATS Serving Offices. It is available with Feature Groups C and D.

(R) Hunt Group Arrangement for use with Special Access Service utilized in the Provision of WATS or WATS-Type Services

This option provides the ability to sequentially access one of two or more Special Access Services utilized in the provision of WATS services (e.g., 800 Series Service Special access services) in the terminating direction, when the hunting number of the Special Access Service group is forwarded from the customer to the Telephone Company. This feature is provided in all Telephone Company designated WATS Serving Offices. It is available with Feature Groups A, B, C and D.

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(S) Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services

This option provides a type of multiline hunting arrangement which provides for an even distribution of terminating calls among the available Special Access Services utilized in the provision of WATS or WATS-type Services in the hunt group. Where available, this feature is only provided in Telephone Company designated WATS Serving Offices. It is available with Feature Groups A, B, C and D.

(T) Nonhunting Number Associated with Hunt Group Arrangement or uniform Call Distribution Arrangement for Use with Special Access Service utilized in the Provision of WATS or WATS-Type Service

This option provides an arrangement, for an individual Special Access Service utilized in the provision of WATS-type Services within a multiline hunt or uniform call distribution group, that provides access to that Special Access Service within the hunt or uniform call distribution group when it is idle or provides busy tone when it is busy, when the nonhunting number is dialed, without hunting to the next idle number. Where available, this feature is only provided in Telephone Company designated WATS Serving Offices. It is available with Feature Groups A, B, C and D.

(U) Digital Switched 56 Service

This option provides for a connection between a customer's premise and a suitably equipped end user's premise which uses end office switching and facilities capable of transmitting digital data up to 56 Kilobits per second. Digital Switched 56 Service is only available in appropriately provisioned Feature Group C and Feature Group D offices as set forth in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(V) Multifrequency Address Signaling

Multifrequency Address Signaling is available as an optional feature with FGC and FGD. This feature provides for the transmission of number information and control signals (e.g., number address signals, automatic number identification) between the end office switch and the customer's premises (in either direction). Multifrequency signaling arrangements make use of pairs of frequencies out of a group of six frequencies. Specific information transmitted is dependent upon feature group and call type (i.e., POTS, coin or operator). This feature is not available in combination with SS7 signaling.

(W) Signaling System 7 (SS7) Signaling

This feature provides common channel out of band transmission of address and supervisory SS7 protocol signaling information between the end office switch or the tandem office switching system and the customer's designated premises. The signaling information is transmitted over facilities provided with the Common Channel Signaling/Signaling System 7 Network Connection Service (CCSNC) as specified in 6.1.3(A) (8) preceding. This feature is available with FGC and FGD and will be provided in accordance with the SS7 Interconnect specifications described in Technical Reference TR-TSV-000905.

(X) Calling Party Number (CPN)

This feature provides for the automatic transmission of the ten digit telephone number, associated with a calling station, to the customer's premises for calls originating in the LATA. The ten digit telephone number consists of the NPA plus the seven digit telephone number, which may or may not be the same number as the calling station's charge number. The ten digit telephone number will be coded as presented, or restricted via a "privacy indicator" for delivery to the called end user. This feature is automatically provided with originating, FGC and FGD with SS7 signaling. CPN is available where technically feasible.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

(X) Calling Party Number

(1) Restrictions on Use and Sale of CPN

(a) Intrastate access customers of this tariff may use CPN in the following manner:

- (i) For billing and collection information, for routing, screening, and completing the originating subscriber's call or transaction, or for services directly related to the originating telephone subscriber's call or transaction.

The customer may use CPN to offer a product or service that is directly related to the products or services previously acquired from the customer by the originating subscriber.

(b) Intrastate access customers of this tariff may not use CPN in the following manner:

- (i) Reusing or selling the telephone number or billing information without first notifying the originating telephone subscriber and obtaining the affirmative consent of such subscriber for such reuse or sale.
- (ii) Disclosing (except as permitted in (a), preceding) any information derived from the CPN for any purpose other than 1) performing the services or transactions that are the subject of the originating subscriber's call, 2) ensuring network performance security and the effectiveness of call delivery, 3) compiling, using, and disclosing aggregate information, and 4) complying with applicable law or legal process.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

(Y) Carrier Selection Parameter (CSP)

This feature provides for the automatic transmission of a signaling indicator which signifies to the customer whether or not the call being processed originated from a presubscribed line. If the line was presubscribed, the indicator will signify if the end user did or did not dial 101XXXXX. This feature is provided with originating FGD with SS7 signaling.

(Z) Charge Number Parameter (CNP)

(1) The CNP is equivalent to the existing ten digit Automatic Number Identification (ANI) available with FGC where technically feasible and FGD with MF signaling. The CNP provides for the automatic transmission of the ten digit billing number of the calling station and the originating line information. This feature is provided with originating FGC and FGD with SS7 signaling.

(2) Restrictions on Use and Sale of CNP

(a) Intrastate access customers of this tariff may use CNP in the following manner:

(i) For billing and collection information, for routing, screening, and completing the originating subscriber's call or transaction, or for services directly related to the originating telephone subscriber's call or transaction.

The customer may use CNP to offer a product or service that is directly related to the products or services previously acquired from the customer by the originating subscriber.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

(Z) Charge Number Parameter (CNP) (Cont'd)

(2) Restrictions on Use and Sale of CNP (Cont'd)

(b) Intrastate access customers of this tariff may not use CNP in the following manner:

- (i) Reusing or selling the telephone number or billing information without first notifying the originating telephone subscriber and obtaining the affirmative consent of such subscriber for such reuse or sale.
- (ii) Disclosing (except as permitted in (a), preceding) any information derived from the CNP for any purpose other than 1) performing the services or transactions that are the subject of the originating subscriber's call, 2) ensuring network performance security and the effectiveness of call delivery, 3) compiling, using, and disclosing aggregate information, and 4) complying with applicable law or legal process.

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(AA) Flexible Automatic Number Identification (Flex ANI)

Flex ANI is a Common Switching Optional Feature that enhances the existing Automatic Number Identification (ANI) optional feature (described in 6.10.1 (F) preceding) by allowing Feature Group D (FGD) customers to receive additional information digits. Flex ANI provides additional values for these information digits over and above the values currently available with ANI and is used to identify additional call types, e.g., 27 for pay telephones requiring central office coin supervision capability, 29 for prison/inmate pay telephones, and 70 for pay telephones not requiring central office coin supervision. Flex ANI can also be used to provide Originating Line Screening (OLS) service. OLS service is described in 13.8 following.

Flex ANI information digits are two digits in length and are activated through switched software program updates. These codes precede the 10-digit directory number of the calling line are part of the signaling protocol in equal access end offices. The information digits are outpulsed by the switching system along with the directory number from the originating end office and are sent to the receiving office for billing, routing, or special handling purposes.

Customers who have ANI but do not order Flex ANI, will continue to receive the information digits associated with ANI. Flex ANI digits are assigned by the North American Numbering Plan Administrator. The Telephone Company will make available those information digits that are mutually agreed to by the customer and the Telephone Company

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

(AA) Flexible Automatic Number Identification (Flex ANI) (Cont'd)

Flex ANI is available to customers with FGD Switched Access Service equipped with ANI. Flex ANI is available in suitably equipped end offices as identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.



## ACCESS SERVICE

### 6. Switched Access Service (Cont'd)

#### 6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

##### 6.10.2 Transport Termination Nonchargeable Optional Features

###### (A) Rotary Dial Station Signaling

This option provides for the transmission of called party address signaling from rotary dial stations to the customer designated premises for originating calls. This option is provided in the form of a specific type of Transport Termination. It is available with Feature Group B, only on a directly trunked basis.

###### (B) Operator Trunk - Coin, Non-Coin, or Combined Coin and Non-Coin

This option may be ordered to provide coin, non-coin, or combined coin and non-coin operation. It is available only with Feature Group C and is provided in electronic end offices and other Telephone Company end offices where equipment is available. It is provided as a trunk type of Transport Termination.

###### Coin, Non-Coin:

This arrangement provides for initial coin return control, except in the case of non-coin, and routing of 0+, 0-, 1+, 01+ or 011+ prefixed originating coin and non-coin calls requiring operator assistance to the customer designated premises. Because operator assisted coin calling traffic is routed over a trunk group dedicated to operator assisted calls, this arrangement is only provided in association with the Service Class Routing option.

This arrangement is normally ordered by the customer in conjunction with the ANI optional feature, since the preponderance of trunk groups equipped with this arrangement will be terminated in the customer's automated operator services systems, rather than in the customer's manual cord boards.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.2 Transport Termination Nonchargeable Optional Features

(B) Operator Trunk - Coin, Non-Coin, or Combined Coin and Non-Coin (Cont'd)

Combined Coin, Non-Coin:

When so equipped, the ANI optional feature provides for the forwarding of information digits which identify that the call has originated from a hotel or motel, and whether room number identification is required, or that special screening is required, e.g., for coinless public stations, dormitory or inmate stations, or other screening arrangements agreed to between the customer and the Telephone Company.

(C) Operator Trunk - Full Feature

This option provides the initial coin return control function to the customer's operator. It is available with Feature Group D and is provided as a trunk type for Transport Termination. This feature is not available with SS7 Signaling.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.3 Chargeable Optional Features

(A) Interim NXX Translation

This service is an originating offering utilizing trunk side Switched Access Service and provides a customer identification function based on the dialed SAC and NXX code.

For example, when a 1+900+NXX-XXXX call is originated by an end user, the Telephone Company will perform the customer identification function based on the dialed digits to determine the customer location to which the call is to be routed. If the call originated from an end office switch not equipped to provide the customer identification function, the call will be routed to an office at which the function is available. Once customer identification has been established, the call will be routed to that customer. Calls originating from an end office switch at which the customer identification function is performed, but to which the customer has not ordered Interim NXX Translation, will be blocked.

Calls to a 900 number dialed via 1+ from coin telephones, 0-, 101XXXX, Inmate Service, and Hotel/Motel Service will be blocked. Calls to a 900 number dialed via 0+ will normally be blocked. Orders received from customers to unblock 0+ calls to a 900 number will be accommodated where suitably equipped facilities exist.

The manner in which Interim NXX Translation is provided is dependent on the status of the end office from which the service is provided (i.e., equipped with equal access capabilities or not equipped with equal access capabilities). When Interim NXX Translation is provided from an end office not equipped with equal access capabilities, it will be provided in conjunction with FGC Switched Access Service.

The charge for Interim NXX Translation is as set forth in 17.1.1(C) following.

## ACCESS SERVICE

### 6. Switched Access Service (Cont'd)

#### 6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

##### 6.10.3 Chargeable Optional Features (Cont'd)

##### (B) Operator Transfer Service

At the option of the customer, Operator Transfer Service as specified following, is available for use with Feature Group C and Feature Group D Switched Access Service. Operator Transfer Service is ordered as set forth in 5.2 preceding and is provided to the customer via separate FGC or FGD trunks dedicated to Operator Transfer Service traffic.

Operator Transfer Service is an arrangement in which Telephone Company operators transfer 0 minus (0-) calls (calls for which the end user dials 0 with no additional digits) to the customer designated by the end user.

The operator transfer function will be performed in the following manner:

- The operator answers the 0- call.
- Initially, the Operator will suggest that the end user dial the customer on a direct basis. If the end user insists that the Operator transfer the call, the Operator will ask the end user to identify the desired customer and will then transfer the call as directed.
- If the end user has no preference, or the identified customer has not subscribed to Operator Transfer Service, the end user will be asked to select from a list of available customers.

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.3 Chargeable Optional Features (Cont'd)(B) Operator Transfer Service (Cont'd)

The list of available Operator Transfer Service customers will be updated monthly. The order in which customers will be read to end users will be initially determined by the sequence in which customers have ordered the Operator Transfer Service. For each subsequent month, following the initial order of Operator Transfer Service, the customer in the first position on the list will be moved to the last position on the list. All other customers on the list will be moved up one position, e.g. 3rd to 2nd, 2nd to first, etc. New Operator Transfer Service customers will initially be placed at the bottom of the list of customers.

0 minus Public Coin calls will be transferred to the end user designated customer. In order to accept coin sent-paid calls, the customer must order signaling as specified in TR-TSY-000506 and TR-NPL-000258.

The customer may receive inband, multi-wink, or expanded inband coin control signaling, where available, from end offices served by an Operator Services Access Point. Different signaling types cannot be mixed on a signal trunk group.

All non-recurring and usage sensitive rates and charges normally applicable to Feature Groups C or D applies to Operator Transfer Service. Additionally, a charge as specified in 6.1.3(C)(2) preceding and 17.1.7 following, is assessed the customer per 0 minus call transferred.

(C) Common Channel Signaling/Signaling System 7 Network Connection Service (CCSNC)

Common Channel Signaling/Signaling System 7 (CCS/SS7) Network Connection Service (CCSNC), which is available with Feature Group C and D, where technically feasible as designated in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION, provides a signaling path between a customer's designated Signaling Point of Interface (SPOI) and a Signaling Transfer Point (STP). This service provides customers with the use of a two-way signaling path for accessing information necessary for the completion of their end user's calls.

## ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.3 Chargeable Optional Features (Cont'd)(C) Common Channel Signaling/Signaling System 7 Network Connection Service (CCSNC) (Cont'd)

CCS/SS7 Network Connection Service is comprised of two parts; a Signaling Network Access Link (SNAL, consisting of Signaling Mileage Facility, Signaling Mileage Termination and Signaling Entrance Facility) and a Signaling Transfer Point (STP) Port. The SNAL is provided as a dedicated 56 Kbps out-of-band signaling connection between the customer's SPOI and the STP Port on the STP.

The CCS/SS7 Network Connection Service is provisioned by a mated pair of STPs as described in Technical Reference TR-TSV-000905 in order to ensure network availability and reliability. The Telephone Company shall not be held liable for service outages if the customer employs technology related to the interconnection of signaling networks that do not adhere to generally accepted industry technical standards.

When CCS/SS7 Network Connection service is provisioned for use with SS7 Signaling, interconnection between signaling networks must occur at an STP.

Rates and charges for the CCS/SS7 Network Connection STP Ports and Signaling Network Access Links are contained in 17.1.2 following.

(D) Toll Free Code (TFC)

Toll Free Code is provided with FGC or FGD Switched Access Service. When a 1+800 series +NXX-XXXX call is originated by an end user, the Telephone Company will utilize the Signaling System 7 (SS7) network to query an 800 data base to perform the identification function. The call will then be routed to the identified customer over FGC or FGD switched access. The 800 series includes the following service area codes: 800, 888, 877, 866, 855, 844, 833 and 822.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.3 Chargeable Optional Features (Cont'd)

(D) Toll Free Code (TFC) (Cont'd)

The manner in which Toll Free Code is provided is dependent on the availability of SS7 service at the end office from which the service is provided as outlined following:

- When a Toll Free Code originates at an end office equipped with Service Switching Point (SSP) capability for querying centralized data bases or at a non-SSP equipped end office that can accommodate direct trunking of originating 800 series calls, all such service will be provisioned from that end office.
- When a Toll Free Code originates at an end office not equipped with SSP customer identification capability, the 800 series call will be delivered to the access tandem on which the end office is homed for 800 series service and which is equipped with the SSP feature to query centralized data bases.
- When a Toll Free Code originates at an end office equipped with SSP capability that is not capable of accommodating direct trunking of originating 800 series (other than the 800 service access codes) calls, the 800 series (other than the 800 service access codes) calls, will be delivered to the access tandem on which the end office is homed and which is equipped with the SSP feature to query centralized data bases.

Query charges as set forth in 17.1.4 following are in addition to those charges applicable for the Feature Group C or Feature Group D switched access service.

## ACCESS SERVICE

17. Rates and Charges17.1 Switched Access Service17.1.1 Interconnection Charge

	<u>Terminating</u>	<u>Originating</u>
(A) <u>Premium Access</u>		
Rates per access minute	\$0.000000	\$0.000000
(B) <u>Transitional Access</u>		
Rates per access minute	\$0.000000	\$0.000000
(C) <u>Premium Access - Collocated</u>		
Rates per access minute	\$0.000000	\$0.000000
(D) <u>Transitional Access - Collocated</u>		
Rates per access minute	\$0.000000	\$0.000000



17. Rates and Charges (Cont'd)

### 17.1.2 Switched Transport

### Monthly Rates

### **Nonrecurring Charges**

- (1) Voice Grade  
Per Point of Termination  
Two-Wire  
Four-Wire

- |     |            |          |          |
|-----|------------|----------|----------|
| (2) | <u>DS1</u> |          |          |
|     | Per DS1    | \$255.00 | \$400.00 |

- (3) DS3  
Per Point of Termination

<u>Monthly Rates</u>			<u>Nonrecurring</u>	<u>Nonrecurring</u>
<u>Within</u>	<u>0 - 3</u>	<u>Over 3</u>	<u>Installation</u>	<u>Rearrangement</u>
<u>CQ</u>	<u>Miles</u>	<u>Miles</u>	<u>Charges</u>	<u>Charges</u>
\$1,620.00	\$2,050.00	\$2,110.00	\$ 400.00	\$ 200.00

## ACCESS SERVICE

17. Rates and Charges (Cont'd)17.1 Switched Access Service (Cont'd)17.1.2 Switched Transport (Cont'd)(B) Direct Trunked Transport

		<u>Monthly Rates</u>	
		<u>Fixed</u>	<u>Per Mile</u>
(1)	<u>Voice Grade</u> - Per Channel	\$ 85.00	\$ 8.25
(2)	<u>DS1</u> - Per DS1	\$132.00	\$ 16.00
(3)	<u>DS3</u> - Per DS3	\$935.00	\$ 91.10

## ACCESS SERVICE

17. Rates and Charges (Cont'd)17.1 Switched Access Service (Cont'd)17.1.2 Switched Transport (Cont'd)(C) Tandem - Switched Transport

	<u>Termination</u> <u>Per Access</u> <u>Minute</u> <u>Fixed</u>	<u>Facility</u> <u>Per Access</u> <u>Minute</u> <u>Per Mile</u>
(1) <u>Tandem - Switched Transmission</u>	\$ 0.000247	\$ 0.000027
	<u>Rate Per</u> <u>Access Minute</u>	
(2) <u>Tandem Switching</u>	\$ 0.000405	
(3) <u>Common Transport Multiplexing</u>	\$ 0.000728	
(4) <u>Common Trunk Port</u>	\$ 0.000450	
	<u>Monthly Rate</u>	
(5) <u>Dedicated Trunk Port</u>		
(a) Per DS0 line or trunk	\$ 3.94	
(b) Per DS1 line or trunk	\$ 94.45	
(c) Per DS3 line or trunk	\$ 2,644.71	

## ACCESS SERVICE

17. Rates and Charges (Cont'd)17.1 Switched Access Service (Cont'd)17.1.2 Switched Transport (Cont'd)(D) Optional Features

	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>
<u>Multiplexing</u>		
- DS1 to Voice	\$ 350.00	\$ 127.00
- DS3 to DS1	\$ 645.00	\$ 81.00

(E) Installation

- Per Line or Trunk	\$ 36.00
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ACCESS SERVICE

17. Rates and Charges (Cont'd)

17.1 Switched Access Service (Cont'd)

17.1.3 Local Switching

Rates Per  
Access Minute

Premium Rates

LS1 - Originating and Terminating Feature  
Group A and Feature Group B \$0.021691

LS2 - Originating and Terminating Feature  
Group C and Feature Group D \$0.021691

## ACCESS SERVICE

17. Rates and Charges (Cont'd)17.1 Switched Access Service (Cont'd)17.1.3 Local Switching (Cont'd)(A) Trunk Conversion Charge

A nonrecurring charge(s) will apply when a customer requests a conversion of FGD trunks from multifrequency address signaling to SS7 signaling or from SS7 signaling to multifrequency signaling as specified below.

	<u>Nonrecurring Charge</u>
Per 24 Channels converted or Fraction Thereof	\$ 32.00

(B) End Office to Tandem Rearrangement Charge

A nonrecurring charge(s) as specified below will apply when a customer requests end office or tandem rearrangement of FGD trunks as set for in Section 6.4.1

	<u>Nonrecurring Charge</u>
Per 24 Channels converted or Fraction Thereof	\$ 60.00

(C) Carrier Selection Parameter Charge

A nonrecurring charge(s) as specified below will apply when a customer requests Carrier Selection Parameter optional feature described in Section 6.10.1 preceding. This charge does not apply if the feature is installed with the initial installation of a service.

	<u>Nonrecurring Charge</u>
Per End Office Equipped	\$ 16.00

## ACCESS SERVICE

17. Rates and Charges (Cont'd)17.3 Other Services (Cont'd)17.3.5 Miscellaneous Service (Cont'd)(L) Billing Name and Address ServiceNonrecurring  
Charge

- Per BNA Order	\$0.00
- Per BNA Record	
Manual	\$1.40
Automatic	\$0.15
- Optional Magnetic	
Tape Charge - Per	
Magnetic Tape	ICB
- Optional Format	
Programming Charge	
- Per each half hour	
or fraction thereof	N/A

(M) Originating Line Screening OLS Service

Per line or trunk \$20.00

(N) Billed Number Screening

Per line or trunk \$20.00

(O) International DDD Blocking

Per line or trunk \$20.00